| <br>dex o | <br>- |  |
|-----------|-------|--|
|           |       |  |

| Application/Control N | Ο. |
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10/797,751

Examiner

Applicant(s)/Patent under Reexamination
HUSTON, ROBERT B.

Art Unit

Stephen M. Johnson

3641

| - | Allowed  |  |
|---|----------|--|
| J | Rejected |  |

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Restricted

Non-Elected

I Interference

| A | Appeal   |
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| 0 | Objected |

| Cla   | im                              | Date   |                           |          |          |            |          |          |          |          |  |
|-------|---------------------------------|--------|---------------------------|----------|----------|------------|----------|----------|----------|----------|--|
|       |                                 |        |                           |          |          |            |          |          |          |          |  |
| Final | Original                        | 90/6/9 |                           |          |          |            |          |          |          |          |  |
|       | 1                               | -      |                           |          |          |            |          |          |          |          |  |
|       | 2                               | -      |                           |          |          |            |          |          |          |          |  |
|       | 3                               |        |                           |          | _        |            |          |          |          | Н        |  |
|       | -                               | -      | _                         | _        |          |            | -        |          | -        | Н        |  |
|       |                                 |        |                           | _        |          | -          | -        | _        | Н        | Н        |  |
|       | -                               | -      | -                         | -        | -        | -          | _        |          | -        |          |  |
|       | 1<br>2<br>3<br>4<br>5<br>6<br>7 | -      | -                         | -        | -        | -          |          | _        | $\vdash$ | $\dashv$ |  |
|       | -                               | -      |                           |          |          | -          | _        | _        | -        | Н        |  |
|       | 0                               | ŀ      | $\vdash$                  | -        | -        |            |          |          | _        | $\vdash$ |  |
|       | 8<br>9<br>10                    | ŀ      | _                         |          |          |            |          | _        |          | Н        |  |
|       | 10                              | -      |                           | _        |          |            | _        | _        |          |          |  |
|       | 11                              | -      |                           | _        | _        |            |          | _        | _        |          |  |
|       | 12                              | -      |                           | اسا      | <u> </u> |            | $\vdash$ | <u> </u> | _        | Ш        |  |
|       | 13                              | -      |                           | <u> </u> | <u> </u> |            |          |          | H        | -        |  |
|       | 12<br>13<br>14<br>15            | -      | $ldsymbol{ldsymbol{eta}}$ | <u> </u> | L        | <u> </u>   | Ш        | <u> </u> | Щ        | Ш        |  |
|       | 15                              | Ŀ      |                           | L        |          | _          |          |          |          |          |  |
|       | 16<br>17<br>18                  | -      | $ldsymbol{ldsymbol{eta}}$ |          | _        | L          | _        | Щ.       |          | Щ        |  |
|       | 17                              |        | oxdot                     | _        | Щ        | L          |          |          |          |          |  |
|       | 18                              | Ŀ      |                           |          |          |            |          |          |          |          |  |
|       | 19                              | Ŀ      |                           | _        |          | lacksquare |          |          |          |          |  |
|       | 20                              | ŀ      |                           |          | _        |            |          |          |          |          |  |
|       | 21                              | ٧      |                           | L        | _        |            |          |          |          |          |  |
|       | 22                              | V      |                           |          |          |            |          |          |          |          |  |
|       | 21<br>22<br>23<br>24<br>25      | v<br>v |                           |          |          |            |          |          |          | Ш        |  |
|       | 24                              | v      |                           |          | _        |            |          |          |          |          |  |
|       | 25                              | ٧      |                           |          | L        |            |          |          |          |          |  |
|       | 26                              | ٧      |                           |          | _        |            |          |          |          |          |  |
|       | 27                              | V      |                           |          | L        |            |          |          |          |          |  |
|       | 28                              | v      |                           |          |          |            |          |          |          |          |  |
|       | 27<br>28<br>29                  | -      |                           | <u> </u> | L.       |            |          |          |          |          |  |
|       | 30                              | -      |                           |          |          |            |          |          |          |          |  |
|       | 31                              | ٧      |                           | L        |          |            |          |          |          |          |  |
|       | 32                              | V      | L                         | L        | L        |            |          |          |          |          |  |
|       | 32<br>33                        | ٧<br>٧ |                           |          |          |            |          |          |          |          |  |
|       | 34                              | -      |                           |          | L        |            |          |          |          |          |  |
|       | 35<br>36                        | Ŀ      |                           | L        |          |            |          |          |          |          |  |
|       | 36                              | ٧      |                           |          |          |            |          |          |          |          |  |
|       | 37                              | -      |                           |          | Ĺ        |            |          |          |          |          |  |
|       | 38                              | ٧      | L                         |          |          |            |          |          |          |          |  |
|       | 39                              | v      |                           |          |          |            |          |          |          |          |  |
|       | 40                              | ٧      |                           |          |          |            |          |          |          |          |  |
|       | 41                              | ٧      | L                         |          |          |            |          |          |          |          |  |
|       | 42                              | v      |                           |          |          |            |          |          |          |          |  |
|       | 43_                             | 0      |                           |          |          |            |          |          |          | Ĺ        |  |
|       | 44                              | ٧      |                           |          |          |            |          |          |          |          |  |
|       | 45                              | 0      | Ĺ                         |          |          |            |          | Ĺ        |          |          |  |
|       | 46                              | ŀ      | L                         |          |          |            |          |          |          |          |  |
|       | 47                              | -      |                           |          |          |            |          |          |          |          |  |
|       | 48                              | ٧      |                           |          |          |            |          |          | L        |          |  |
|       | 49                              | ٧      |                           |          |          |            |          |          | Ĺ        |          |  |
|       | 50                              | v      |                           |          |          | Γ.         |          | Г        | Г        |          |  |

| Cla         | im       | n Date         |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|-------------|----------|----------------|------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|----------|----------------|----------|
| Final       | Original | 90/6/9         |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
| -           | 51       | v              |            |                                                  |                                                  | _                                                |                                                  | -        |                |          |
|             | 52       | v              |            |                                                  |                                                  | -                                                |                                                  |          |                |          |
|             | 52<br>53 | v              |            |                                                  | _                                                | -                                                | _                                                |          |                |          |
| <del></del> | 54       | l <del>`</del> | -          | $\vdash$                                         |                                                  | -                                                | -                                                |          | -              |          |
|             | 54       | ⊢              | _          | H                                                | _                                                |                                                  |                                                  |          |                |          |
|             | 55       | L              | _          | ⊢                                                | _                                                |                                                  |                                                  |          |                |          |
| -           | 56       | L              |            | <u> </u>                                         |                                                  |                                                  |                                                  |          |                | _        |
|             | 57       | _              |            | <u> </u>                                         | _                                                | _                                                |                                                  |          |                | _        |
|             | 58       |                |            | <u> </u>                                         |                                                  |                                                  |                                                  |          |                |          |
|             | 59       |                | _          | <u> </u>                                         | L_                                               |                                                  |                                                  |          |                |          |
|             | 60       | <u> </u>       | <u> </u>   |                                                  | _                                                |                                                  |                                                  |          |                |          |
|             | 61       | L              | <u> </u>   | _                                                |                                                  |                                                  |                                                  |          |                |          |
| <u></u>     | 62       |                |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|             | 63       |                | _          |                                                  |                                                  | L                                                |                                                  |          |                |          |
|             | 64       |                | L          | L                                                | L                                                |                                                  |                                                  |          |                |          |
|             | 65       |                |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|             | 66       |                |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|             | 67       |                |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|             | 68       |                |            |                                                  | <u> </u>                                         | $\vdash$                                         |                                                  |          |                |          |
| <b> </b>    | 69       |                | _          | $\vdash$                                         | $\vdash$                                         |                                                  |                                                  |          |                |          |
| <b>—</b>    | 70       | -              |            | $\vdash$                                         |                                                  | $\vdash$                                         | $\vdash$                                         |          |                | _        |
|             | 71       | $\vdash$       | $\vdash$   | ┢                                                | $\vdash$                                         | $\vdash$                                         | -                                                |          | $\vdash$       | _        |
|             | 71<br>72 | $\vdash$       | H          | ┥                                                | ┢                                                | -                                                |                                                  |          | $\vdash$       | -        |
|             | 73       | -              | $\vdash$   | $\vdash$                                         | -                                                | ┝                                                | ┢                                                | -        | ├─             | $\vdash$ |
|             | 74       | ⊢              | $\vdash$   | ├-                                               | $\vdash$                                         | ⊢                                                | -                                                |          | -              | ┝        |
| -           | 74<br>75 | ⊢              | ⊢          |                                                  | ⊢                                                | ⊢                                                | H                                                | <u> </u> | ┝              |          |
|             | 70       | H              | ⊢          | <del> </del>                                     | -                                                | -                                                | -                                                | -        | ├              | ⊢        |
|             | 76<br>77 | _              | ⊢          | <del> </del>                                     | <u> </u>                                         | ├                                                | <b> </b>                                         | -        | <u> </u>       | ┝        |
| <u> </u>    | 77       | ⊢              | ┞          | ļ                                                | _                                                | <u> </u>                                         | ├-                                               | <u> </u> | <u> </u>       | <u> </u> |
| <u> </u>    | 78       | _              | <u> </u>   | <u> </u>                                         | <u> </u>                                         | <u> </u>                                         | <u> </u>                                         | <u> </u> | <u> </u>       | <u> </u> |
| <u> </u>    | 79       | L.             | _          | <u> </u>                                         |                                                  | _                                                | <u> </u>                                         | <u> </u> |                | <u> </u> |
| <u> </u>    | 80       | _              | <u> </u>   | <u> </u>                                         | <u> </u>                                         |                                                  | <u> </u>                                         | <u> </u> |                | <u> </u> |
|             | 81       |                | lacksquare | _                                                | _                                                | _                                                | <u> </u>                                         | L_       | <u> </u>       | <u> </u> |
|             | 82<br>83 |                | L          |                                                  | L                                                | _                                                | L                                                |          |                |          |
| L           | 83       | <u> </u>       | _          |                                                  |                                                  |                                                  |                                                  |          | L              |          |
|             | 84       |                | 匚          | L                                                | <u> </u>                                         |                                                  |                                                  | L        |                |          |
|             | 85       | L              | _          | $oxedsymbol{oxed}$                               | $\Box$                                           |                                                  |                                                  |          | L              | L        |
|             | 86       | L              |            | Ĺ                                                | L                                                | L                                                |                                                  | L        | L              | L        |
|             | 87       |                |            | $L^-$                                            |                                                  |                                                  |                                                  | L        | L              |          |
|             | 88       |                |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|             | 89       |                | Π          |                                                  | Π                                                | Γ                                                |                                                  |          | Γ              |          |
|             | 90       |                | Π          | Г                                                | Г                                                |                                                  |                                                  | Г        |                |          |
|             | 91       | 1              |            |                                                  | Π                                                |                                                  |                                                  |          |                | <u> </u> |
|             | 92       | T              |            |                                                  |                                                  |                                                  |                                                  |          |                |          |
|             | 92<br>93 | T              | $\vdash$   | T                                                |                                                  | T                                                | Г                                                | _        |                | Г        |
| <u> </u>    | 94       | H              | ┢          | <del>                                     </del> | T                                                | ┢                                                | H                                                | Ι-       | $\vdash$       | $\vdash$ |
|             | 95       | <del> </del>   |            |                                                  | $\vdash$                                         | $\vdash$                                         | <del>                                     </del> | $\vdash$ | $\vdash$       | ┢        |
|             | 96       | $\vdash$       | ┢          | $\vdash$                                         |                                                  | <del>                                     </del> | $\vdash$                                         | Η-       | ┢              | $\vdash$ |
| -           | 97       | ⊢              | -          | $\vdash$                                         | $\vdash$                                         | $\vdash$                                         | $\vdash$                                         | $\vdash$ | $\vdash$       | $\vdash$ |
|             | 98       | $\vdash$       | -          | -                                                | <del>                                     </del> | -                                                | $\vdash$                                         | $\vdash$ | ├-             | $\vdash$ |
|             | 90       | ╁              | -          | ├                                                | ├-                                               |                                                  | -                                                | ⊢        | <del>  -</del> | $\vdash$ |
| ļ           | 99       | ⊢              | ⊢          | ├-                                               | ├-                                               |                                                  | -                                                | ├-       | -              | ├-       |
| L           | 100      | L              | <u> </u>   | L_                                               | L                                                | <u> </u>                                         | <u> </u>                                         | L_       | Ц_             | L_       |

| _                                                 |                                              | Claim                                                |                                                  |              | Date                                |                                                  |          |                                                  |                                                  |          |          |  |
|---------------------------------------------------|----------------------------------------------|------------------------------------------------------|--------------------------------------------------|--------------|-------------------------------------|--------------------------------------------------|----------|--------------------------------------------------|--------------------------------------------------|----------|----------|--|
| $\overline{}$                                     |                                              | 1 1 1                                                |                                                  |              |                                     | _                                                | Jak      | _                                                |                                                  |          | -        |  |
|                                                   | Final                                        | Original                                             |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 101<br>102                                           |                                                  |              |                                     |                                                  | _        |                                                  |                                                  |          |          |  |
|                                                   |                                              | 102                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 103                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 103<br>104<br>105                                    |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 105                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 106                                                  | Ш                                                |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
| —                                                 |                                              | 107                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  | _        | _        |  |
| +                                                 | l                                            | 106<br>107<br>108<br>109                             | Ш                                                |              |                                     |                                                  |          | _                                                | $\vdash$                                         | _        | $\dashv$ |  |
| +-                                                | l <del> </del>                               | 110                                                  | $\vdash$                                         |              | _                                   |                                                  | _        |                                                  |                                                  |          | $\dashv$ |  |
| ┿                                                 | l —                                          | 111                                                  | $\vdash$                                         |              |                                     |                                                  |          | -                                                |                                                  | _        | -        |  |
| +                                                 |                                              | 111<br>112<br>113                                    | H                                                |              | $\vdash$                            | -                                                | Н        |                                                  |                                                  | H        | $\dashv$ |  |
|                                                   |                                              | 113                                                  |                                                  |              | $\vdash$                            | _                                                |          | -                                                |                                                  |          | $\vdash$ |  |
| $\top$                                            |                                              | 1114                                                 | П                                                |              |                                     |                                                  |          | Г                                                |                                                  |          | $\sqcap$ |  |
|                                                   |                                              | 115                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 116<br>117                                           |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 117                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 118                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 119<br>120<br>121                                    |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
| 1_                                                | l                                            | 120                                                  |                                                  |              |                                     |                                                  |          | _                                                |                                                  | _        | Щ        |  |
|                                                   |                                              | 121                                                  | <u> </u>                                         |              | <u> </u>                            | <u> </u>                                         | <u> </u> | _                                                |                                                  | -        | _        |  |
| +                                                 |                                              | 122                                                  |                                                  |              | -                                   | <u> </u>                                         | <u> </u> | _                                                | H                                                |          |          |  |
| +                                                 |                                              | 123                                                  | _                                                |              | -                                   | ⊢                                                | ┝        | ├—                                               | ┝                                                | H        |          |  |
|                                                   |                                              | 124                                                  | -                                                |              | -                                   | ⊢                                                | ⊢        |                                                  | ┝                                                | _        |          |  |
| +                                                 | ┨ ├──                                        | 125                                                  | -                                                | _            |                                     | ┢                                                | ┝╌       |                                                  | ┢                                                | _        | -        |  |
| +                                                 |                                              | 127                                                  | _                                                | _            | $\vdash$                            | $\vdash$                                         | ┝        | <del>  -</del>                                   | $\vdash$                                         | -        |          |  |
| +                                                 |                                              | 128                                                  | 1                                                | _            | $\vdash$                            | Н                                                | -        | $\vdash$                                         | ┢                                                | $\vdash$ |          |  |
| 十一                                                |                                              | 122<br>123<br>124<br>125<br>126<br>127<br>128<br>129 | <del>                                     </del> |              | $\vdash$                            |                                                  |          | <u> </u>                                         |                                                  |          |          |  |
| $\top$                                            |                                              | 130                                                  | <b>-</b>                                         |              | $\vdash$                            |                                                  | _        |                                                  |                                                  |          |          |  |
| 1                                                 |                                              | 131                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
|                                                   |                                              | 132                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
| $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | ]                                            | 133                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
| $\perp$                                           | I 📖                                          | 134                                                  | $\Box$                                           | L_           | L.                                  | <u> </u>                                         | _        | <u> </u>                                         | <u> </u>                                         | L        | Ш        |  |
| _                                                 | I                                            | 130<br>131<br>132<br>133<br>134<br>135<br>136        | <u> </u>                                         | _            | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | ldash                                            | ļ        | $ldsymbol{ldsymbol{eta}}$                        | <u> </u>                                         | _        | Щ        |  |
| +                                                 | I                                            | 136                                                  | <u> </u>                                         |              | ⊢                                   | ┡                                                | <u> </u> | <u> </u>                                         | $\vdash$                                         | <u> </u> | Н        |  |
| +                                                 | <b>│                                    </b> | 137                                                  |                                                  |              | -                                   | -                                                | $\vdash$ | -                                                | <u> </u>                                         | ┝        | Н        |  |
| +                                                 | <b> ├</b> ──                                 | 138<br>139                                           | $\vdash$                                         | -            |                                     | ├                                                | $\vdash$ | -                                                |                                                  | $\vdash$ | Н        |  |
| ╁                                                 |                                              | 140                                                  | H                                                | -            |                                     | -                                                | $\vdash$ | -                                                | -                                                | $\vdash$ | Н        |  |
| +-                                                | 1 -                                          | 141                                                  | $\vdash$                                         | <del> </del> | -                                   | <del>                                     </del> | $\vdash$ | -                                                | <del>                                     </del> | $\vdash$ | Н        |  |
| +                                                 | 1                                            | 142                                                  | $\vdash$                                         | $\vdash$     | ┢                                   | $\vdash$                                         | ┢        | <del>                                     </del> | <del>                                     </del> | $\vdash$ | Н        |  |
| $\top$                                            |                                              | 143                                                  |                                                  |              |                                     | _                                                |          |                                                  | <u> </u>                                         |          | $\Box$   |  |
| 1                                                 | 1                                            | 144                                                  |                                                  | Г            | Γ                                   |                                                  | Г        |                                                  |                                                  |          |          |  |
| $\perp$                                           |                                              | 145                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          |          |  |
| $\perp$                                           |                                              | 146                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  | 匚        |          |  |
| $oldsymbol{\perp}$                                |                                              | 147                                                  |                                                  |              |                                     |                                                  |          |                                                  |                                                  |          | Ш        |  |
| $\perp$                                           |                                              | 148                                                  |                                                  |              |                                     | _                                                | <u> </u> |                                                  | <u> </u>                                         | _        | Щ        |  |
| _                                                 |                                              | 149                                                  |                                                  | <u>_</u>     | _                                   | _                                                | _        | _                                                | <u> </u>                                         | _        | Щ        |  |
|                                                   | ] [                                          | 150                                                  | <u> </u>                                         | L            |                                     |                                                  | L_       | $L_{-}$                                          | L_                                               | <u></u>  | L        |  |